Ms. Wenke B. Thoman Rain Hill Group 27 East 61st Street New York, NY 10021

Dear Ms. Thoman:

I received your letter dated June 23, 1992, in which you indicate that you represent a client interested in marketing bimetallic centrifugally cast pipe for use in accordance with the Federal Regulations applicable to the operation of oil and gas pipelines, particularly in applications where severely corrosive oil or gas is to be transported. I thank you and your client for your interest in assuring that pipe materials intended to be marketed by your client comply with the pipeline safety regulations.

New steel pipe for gas transportation is qualified for use under 49 CFR Part 192 if it was manufactured in accordance with a specification listed in section I of Appendix B Part 192 (See 49 CFR ?192.55). The ASTM specifications listed in the manufacturer's brochure enclosed in your letter are not among those listed in Appendix B. Nonetheless, non-steel metallic materials meeting other specification are not prohibited from being used in gas pipelines of these materials meet ?192.53 requirements. This section requires that all pipe and components be suitable for those applications in which they are used.

The regulations for hazardous liquid pipelines, 49 CFR Part 195, require that new or used pipe installed in a pipeline must meet the performance requirements of ?195.112. There are no other material specifications in Part 195, such as the nickel based alloys listed in the pipe brochure enclosed with your letter. However, under ?195.8, an operator may use a material other than steel, if the Department determines the use would not be unduly hazardous.

The Office of Pipeline Safety (OPS) recognizes that corrosion resistant alloys, suitable for service in severely corrosive situations, are manufactured in pipe form to specifications that are not listed in Part 192, and that such pipe technically is not steel under Part 195. In evaluating materials other than steel to be used in hazardous liquid pipelines, as required by ?195.8, RSPA recognizes that corrosion resistant alloy materials commonly are superior to steel with respect to their suitability for service in

specific severely corrosive situations and are the appropriate alternative to steels. The criteria OPS applies under ?195.8 regarding the use of pipe made from a non-steel corrosion resistant alloy, such as a nickel based alloy are:

- The corrosion resistant alloy materials for pipe must otherwise conform with ?195.112, as appropriate.
- The pipe must be manufactured in conformance with a published specification and documented quality assurance program.
- The procedure for joining lengths of pipe must be qualified for both the pipe material and the intended service.
- It is the responsibility of the pipeline operator to demonstrate that the corrosion resistant alloy pipe and joining procedures are acceptable for the intended service.

The following responds to your questions which I have paraphrased below:

- 1. <u>Q.</u> Where is the process started to obtain approval for pipe manufactured to a specification not listed in Part 192?
 - $\underline{A.}$ No approval is required for pipe to be used in gas service that is not manufactured to a specification not listed in Part 192. In accordance with ?192.53, a pipeline operator is responsible to select materials for severely corrosive conditions that are suitable for the intended service.
- 2. <u>Q.</u> Under Parts 192 and 195, which standards are applicable to corrosion resistant bimetallic pipe?
 - <u>A.</u> There are no standards listed in Part 192 or Part 195 that specifically apply to corrosion resistant bimetallic pipe. However, a pipeline made of such pipe would have to meet all requirements that apply generally to pipelines or pipeline facilities without regard to pipe material.
- 3. Q. When does the Department of Transportation (DOT) get involved with the approval process?
 - A. The OPS does not get involved in the process of selecting or approving material suitable for a gas pipeline. With regard to the use of such material in a hazardous liquid pipeline, a notice of intended use of such material must be

made to this office in accordance with ?195.8. Our evaluation of the of such material would be made using the criteria set forth above.

I note that of the ASTM Specifications listed in Section 3 of the pipe brochure enclosed with your letter, none of the specifications referenced are for bimetallic pipe. ASTM A872 is for corrosion resistant centrifugally cast pipe. Specifications A351, A743, and A744 are for corrosion resistant castings. Specifications B423 and B444 are for corrosion resistant wrought seamless pipe. Specification B662 is not for B662, the brochure probably intended to reference Specification B622, which is for corrosion resistant wrought seamless pipe.

I thank you for your inquiry. If you have further questions, please contact G. Joseph Wolf of my staff at (202) 366-4560

Sincerely,

/signed/

Cesar De Leon Director, Regulatory Programs Office of Pipeline Safety